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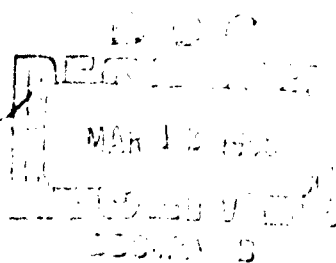
COUNTERINSURGENCY: PRINCIPLES AND  
PRACTICES IN VIET-NAM

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COUNTERINSURGENCY: PRINCIPLES AND PRACTICES IN VIET-NAMJames Farmer<sup>\*</sup>

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This paper discusses the criteria and indicators used for measuring success in counterinsurgency. Three phases of guerrilla warfare are described. It is concluded that a military victory is not possible for the Viet-Cong in South Viet-Nam as long as the U.S. is supporting the government. U.S. financial contribution is compared to U.S. and French costs of the 1945-1954 Indo-China war, and technical assistance and direct military support measures and their effects on the scarce resources--trained manpower, communications, transportation, and government infrastructures--are described. The principles of Viet-Cong tactics are listed and illustrated. The paper suggests the problems of motivating the Vietnamese soldier to fight a war which he no longer feels will be won in the near future.

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This is an edited transcript of a presentation given to the combined classes of the Counterinsurgency Course of the Naval Reserve Officers School at Long Beach, California, on 25 November 1964. Some material has been added to the text to include subjects covered during the discussion period. Some sections, of official interest only, have been deleted for this form of publication.

This is not a report of organized RAND research, but rather is personal opinion and observations from field work in Viet-Nam, previous work in counterinsurgency and limited war, and continued association with American and Vietnamese soldiers and civilians participating in the on-going Vietnamese operation.

The author has benefited from discussions with Jack Ellis, Art Peterson, Vic Sturdevant, and George Young, of The RAND Corporation, Colonel John Shirley, vice president of Booz-Allen Applied Research, who headed the operations analysis effort of the British Army in Malaya and Kenya, and Alfred Blumstein of Cornell University. The author wishes to thank Joe Carrier and Joel Edelman, also of The RAND Corporation, for their assistance in preparing the outline and for critical comments. The author is, as always, solely responsible for the opinions and views expressed.

## I. INTRODUCTION

Counterinsurgency is not guerrilla warfare. This is not an artificial distinction; it comes from the practical reality of fighting the two types of war. For example, it's one thing to destroy a railroad, as a guerrilla insurgent; it is quite another to defend the same railroad against guerrilla sabotage or attack. Guerrilla warfare has been practiced successfully many times in history. There have been, however, few successful counterinsurgency operations.

Our purpose here is to observe the effectiveness of specific strategies, tactics, doctrine, and equipment. We are interested in those that have succeeded and those that have failed, and why. Counterinsurgency has been characterized by one officer as a learning experience where each side continually devises new tactics and counter tactics, new strategies and new counter strategies.

This is not an assessment of the overall U.S. position in Vietnam. Such an assessment is neither necessary, nor useful, for the purpose of evaluating specific principles or practices of counterinsurgency. Such an assessment represents the outcome of all tactics, doctrine and equipment--an aggregation. Although such an assessment is useful for consideration of policy decisions facing the U.S. at a particular time, its aggregate nature precludes a valid measure of success for specific tactics, doctrines or equipments.

## II. CRITERIA FOR WINNING

It is difficult to define a counterinsurgent "win," but two criteria seem useful for evaluating "winning." Both are necessary and neither is sufficient. The first is security. Security for individuals and security for the government. Security which is provided by the military and security which is provided by civil police and other civil organizations. Without security it is impossible to carry forward the programs that are necessary to develop a political and economic base for winning. Second is a viable government. By this we mean efficacious government. One which is capable of producing results; one which is capable of implementing the programs necessary for the political and economic development of the country. By valuing a viable government, we are not prescribing a particular form of government, be it a dictatorship or democracy. It has been U.S. tradition to regard dictatorships with suspicion. It has also been an experience that democracy is a difficult concept to understand and apply in certain cultures.

Many authors regard economic growth as one of the criteria for winning. This is not listed here as necessary, though in most cases some economic betterment of the people is necessary for popular support of the government and its programs. Most less developed countries have a "rising expectation" caused either by contact with developed nations, or by propaganda efforts of revolutionary groups. This "rising expectation" then makes economic betterment a requisite for popular support of a government and its program. Popular support helps develop a government or contributes to its viability, but it

may not be a necessary condition. On the other hand, a rising expectation without economic betterment may be the precursor to insurgency. Revolutionary, and often Communist-inspired, propaganda has made effective use of rising expectations to produce dissatisfaction with a particular government.

### III. INDICATORS

Since there is no set of accepted criteria for "winning," some measurable indicators are used instead. Such indicators provide information for planning, gross but insensitive measures of effectiveness, and clues to patterns of insurgent tactics. These patterns in turn can reveal the underlying strategy. In addition to the usual question of the validity of an indicator, that is, the relationship of what it's measuring compared to what it was intended to measure, these indicators have two severe limitations. First is their aggregate nature. Indicators merely classify and count events. It is difficult to meaningfully lump together events in a counterinsurgency, where there are political, economic and military factors. An obvious example would be Dien-Bien-Phu.\* Dien-Bien-Phu, as far as the indicators are concerned, was one additional "larger than battalion size" attack but its political and military impact was far more significant than any other "larger than battalion size" attack. Second, indicators are generally historical. Often an indicator is revealing what has happened rather than what is happening. By the time that trends or patterns are developed, the situation has advanced beyond timely response.

It may, however, be useful to examine some indicators and their current direction in Viet-Nam. One indicator which is often used, and is similar to the classic indicator of position warfare, is

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\* For a description of the historical and political impact, see Refs. 1 and 2.

the amount of area controlled. One of the difficulties with this indicator is defining "controlled area". In Viet-Nam, for example, there are large portions which are controlled, in an absolute sense, by neither the Viet-Cong nor the government. On one hand the government controls the area during the daytime--they have some freedom of movement--and the Viet-Cong control the area at night. Using this particular definition, the amount of area controlled by the government is declining.

Another classical indicator is casualties--killed, wounded and missing in action. Casualty figures released by the Republic of Viet-Nam show decreasing Viet-Cong casualties and increasing government casualties<sup>(3)</sup> (see Chart 1). Recently released data by U.S. military show the annual rate now at 7000 government troops killed and 14,000 Viet-Cong killed.\* Since the Viet-Cong kill rate is determined by actual body count, the actual number of Viet-Cong killed has been estimated as high as 18,000 for the first 10 months of 1964, a three-to-one ratio for government troops.<sup>(4)</sup>

Morale is an important factor in counterinsurgency and is directly related to the motivation and effectiveness of both civil and military efforts. Morale as such is not directly measurable; however, there are two indicators that can be used to sense morale. One is the relative defection rates from both government forces and

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\* General Westmoreland, Commander U.S. Military Assistance Command, Viet-Nam, gives 6000 GVN killed and 12,000 VC killed during a 10-month period (Ref. 4).

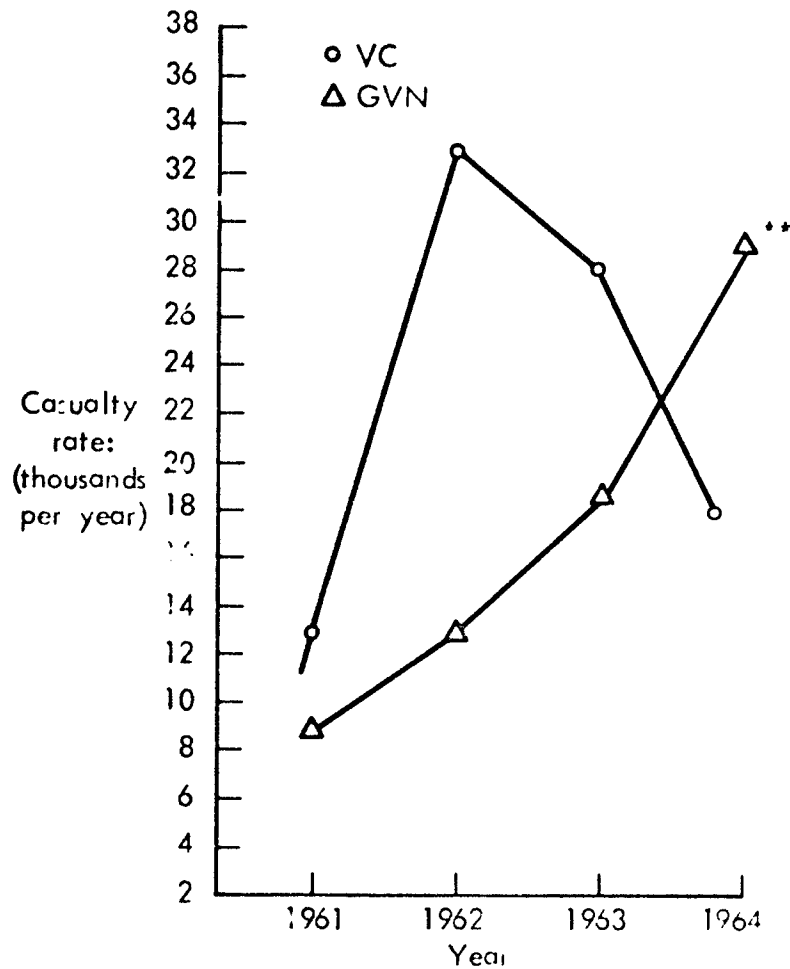


Chart 1—Military casualty\* totals as made public by U.S. command

\* Killed, wounded, and missing

\*\* Based upon Jan 1 - June 30 annual rate of 23,000 casualties and upon July 1 - Oct 14 annual rate of 38,000 casualties

Source: Reference 3



from Viet-Cong forces. Part of the defection rate of government troops may, however, be due to relocation of units. As soon as the soldiers are able to relocate their families near the units, then these men will return to duty.\* In this sense an increased defection rate may in fact be temporary. On the other hand, "strike man-day" losses might be used as a measure of civil unrest since citizens often use strikes as a protest against the government. Such an indicator has limited utility during periods of strong government control as, for example, during the Diem government when strikes were virtually unheard of.

Another indicator is the standard of living; it attempts to measure the economic betterment of the people.\*\* Data released by the Vietnamese statistical service indicate that wages have been steady or slightly declining and that there has been a moderate increase in the cost of living index, which would indicate the standard of living in Viet-Nam is declining. (7,8)

Another indicator, used particularly by the British in Malaya, is intelligence flow. Success is measured by the amount of intelligence which flows into the headquarters about insurgent activities. The intelligence flow is increasing in some provinces in Viet-Nam and in some it is decreasing. Intelligence flow is of particular

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\* Defection rates for 1962-1963 are reported in Ref. 5. The return of government troops to their units is described in Ref. 6.

\*\* In a subsidized economy such as Viet-Nam, most measures of the standard of living include the effect of the subsidy on the consumer.

interest because of positive feedback. If the counterinsurgency is succeeding, the intelligence flow is increasing, and this intelligence flow increase in turn permits the government to increase the effectiveness of its operation, making an additional contribution to success. Success is contagious, and feeds itself. Unfortunately, the lack of success decreases the intelligence flow and reduces the effectiveness of government operation.

Another indicator is the relative military strength. Such an index is useful in several ways. First, it is a measure of relative combat capabilities--a useful piece of information where armed conflict is involved, especially when the insurgents may change the level of warfare. Second, changes in relative strength indicate the ability of each side to maintain the integrity of its forces and to recruit new forces. Third, it might be useful in determining the amount of manpower the government "needs" to mobilize in the future. On the other hand, comparing force ratios with other counterinsurgency operations may lead to wrong conclusions since the necessary force ratio is sensitive to geography, force mixes (e.g., airpower, defensive and offensive ground forces, civil police), logistics, and popular support. In Viet-Nam the military strength of both the Viet-Cong and the government troops has remained relatively steady for the past two years.\*

Analysts associated with the counterinsurgency in Viet-Nam have attempted to develop other indicators. These include weighted indica-

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\* See the remarks of U.S. Military Assistance Command spokesman at a Saigon briefing, July 29, 1964, for estimates of Viet-Cong size and growth (Refs. 9, 10). Unofficial estimates are contained in Ref. 11. This gives estimated hard-core Viet-Cong strength at 30,000. Grose also noted that defection rate of the VC has increased "...as men with less training and motivation were summoned into battle."

tors of Viet-Cong activities (output) and supplies and manpower (input). Most are based on intelligence or status data and suffer from the usual problems of developing indicators from incomplete and inaccurate data and incomplete knowledge of the theory of insurgency. The data are not intentionally incomplete or inaccurate, but war is not the orderly process of peacetime economic activity in a developed country. Such development of indicators not only assists the effort in Viet-Nam, but by contributing to our overall understanding of national development and insurgency, may be of great value in future counterinsurgencies, or better, in preventing insurgencies.

#### IV. PHASES OF GUERRILLA WARFARE

In his writings on guerrilla warfare General Vo-*Nguyen-Giap*,<sup>(2)</sup> borrowing from Mao Tse-tung,<sup>(12)</sup> has outlined three main stages of prolonged "revolutionary war": defensive, "equilibrium," and general counteroffensive. In the first stage, the comparatively weak revolutionary forces execute a "strategic withdrawal from the cities to the countryside" in order to preserve their strength, build up rural bases, mobilize the population, and prepare for a counterattack. In the second stage, as the rural build-up achieves an "equilibrium of forces," the insurgents turn to offensive guerrilla operations. Committing units up to battalion and regimental strength, they force the enemy to divide his forces and keep him constantly off balance. Gradually the main revolutionary forces become strong enough to advance from isolated guerrilla attacks to "mobile warfare" involving larger units in decisive conventional operations against the enemy's main elements.

Another classification of guerrilla warfare by size and type of action is perhaps more useful in considering counterinsurgency, as contrasted to insurgency. Here the first phase is terror attacks, where the insurgent strength is small relative to the strength of the government forces. Such a campaign of terror can be carried on without expending a large amount of guerrilla resources--specifically, weapons, ammunition, and manpower. The second phase is guerrilla operations where organized bands lead attacks against outposts, set ambushes, attack village defenses, and occasionally direct attacks against military or government installations either for political or logistical

purposes. The third phase is position warfare. Position warfare is the classic military operation of seizing and holding ground. In the case of insurgents, this would mean having territory where government troops would be unable to enter because of insurgent strength. It's important to differentiate here between the land seized in position warfare and areas in Viet-Nam which are controlled by the Viet-Cong. For example, Zone D is controlled by the Viet-Cong in the sense that government officials claim only VC operate in this particular area. The VC have hospitals, ammunition factories and headquarters there. This does not mean, however, that government troops cannot penetrate this area. In fact, in the last few weeks "Operation Brushfire" penetrated the area.\* By the time government troops arrived, the intelligence bow wave from the threshing of such large units had adequately warned the Viet-Cong and they were able to close operations, hide their equipment and leave the area. The Viet-Cong made no attempt to hold this area against government troops by military strength. This is not position warfare. Position warfare is necessary for an insurgent military victory, hence a military victory against the well-supplied, well-equipped Army (such as the Army of Viet-Nam) is probably not practicable. More specifically, as long as the U.S. supports the Vietnamese operation there will never be an insurgent military victory. But on the other hand, an army has limited effectiveness against a terror campaign: too many men are required to maintain absolute

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\*A history of Zone D, a description of the terrain and operations in 1962-63 are given in Ref. 13. Operation Brushfire also penetrated Zone D without significant results. This operation is described in Ref. 14. A similar operation named Boondodge on November 28, 1962, is described in Ref. 15. The present geographical bounds of Zone D are given in Refs. 16 and 17.

security. Hence against a well-equipped, well-supplied army the best strategy for insurgents may be to attempt an economic or political victory. It is important to note that the insurgent force is the one that most strongly determines the level of warfare. It can attempt to fight through terror, through guerrilla operations, or through position warfare.\*

General Giap, now Minister of Defense and Chief of the People's Army for the Democratic Republic of Viet-Nam, attempted position warfare early in the Viet-Minh fight against the French in North Viet-Nam. In 1947-48, he attempted several company-sized holding operations, but immediately abandoned such tactics when their positions formed ideal targets for the French parachute battalions. Giap learned quickly and abandoned this particular form of warfare.\*\*

Air power has a significant role in counterinsurgency since it precludes position warfare, and, if a quick reaction capability can be obtained, greatly reduces the effectiveness of guerrilla operations. The effectiveness of guerrilla operations depends both on the size of the force which can be massed and the time it can operate as a unit before dispersal is necessary. Extensive aerial reconnaissance dictates against the formation of large units, thereby limiting unit size, as well as greatly restricting the amount of time an operation can take before government reinforcements arrive. Thus airpower reduces guerrilla effectiveness in two ways.

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\*For the Viet-Cong's publically announced objectives, see Ref. 18.

\*\*For accounts of Giap's combat experience, see Refs. 1, 2, and 19.

## V. VIET-CONG STRATEGY

There has been a continuum of Viet-Cong activity since the Geneva Accords in 1954. Geneva Accords separated the country into two halves-- North and South Viet-Nam--and marked the end of French military influence in Indochina. (20) The Viet-Minh army had been fighting against the French in both North and South Viet-Nam and many of the Viet-Minh soldiers in South Viet-Nam were invited to relocate in North Viet-Nam during the exchange of inhabitants which occurred in 1954. The period 1954-1957 can then be marked as an organization and build-up phase for the Viet-Cong.\* This organization and build-up occurred both in North and South Viet-Nam; Cadres were training in North Viet-Nam.

The Viet-Minh infrastructures had to be repaired and adapted to Viet-Cong use. Intelligence networks had to be extended to the South Vietnamese government.

About 1957, the terrorist campaign began with increases in terrorism and a few attacks. These increased terror and guerrilla operations continued until 1961. In 1962 there appeared to be a shift in emphasis from attacks to terror. This shift may have been in response to increased military effectiveness due to the influx of U.S. supplies and advisors. The change from attacks to terror has

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\*The Viet-Minh was a nationalist political party whose objective was freeing Viet-Nam from the "French Imperialists." This party was used by the Communists as a nationalist front and the name Viet-Minh is often used generically to refer to the insurgents fighting against the French-supported Vietnamese government from 1945 to 1954. Viet-Cong is the name given to the insurgents fighting against the Republic of Viet-Nam (South Viet-Nam) following the partitioning of the country with the Geneva Accords of July 1954. For additional information see Ref. 21.

continued--the change increasing in the past year.

There was one exception to the consistent strategy of terror and guerrilla operations--the 1963 attack on Quang Ngai province. The Viet-Cong attacked several villages and the provincial capital in Quang Ngai province, a traditional Viet-Cong--Viet-Minh stronghold, apparently in an attempt to hold ground for some political purpose. It is speculated that if the Viet-Cong could have held a major part of the province, they would have attempted to declare a government and obtain recognition for it.\* Because of reinforcements and the military strength in Quang Ngai province this attack failed.

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\*Details of the attack are contained in Refs. 22 and 23. In Saigon some of the press corps and the military attempted to explain why the Viet-Cong began a series of attacks which must, in the end, have been very costly. The only plausible explanation at the time was an attempt to gain world recognition of their efforts. If so, the Viet-Cong underestimated the government's military strength and its ability to react.



# VI. THE ROLE OF NORTH VIET-NAM AND CHINA

North Viet-Nam has provided cadres, centralized direction and specialized supplies to South Viet-Nam. The South Vietnamese members of the Viet-Minh which went to North Viet-Nam in 1954 have been steadily returning to South Viet-Nam to provide the hard-core cadres of the insurgent effort. From captured documents, it is known that centralized direction of the counterinsurgent effort in South Viet-Nam is provided by North Viet-Nam itself via radio and jungle couriers. Some specialized supplies have been provided to South Viet-Nam by the North Vietnamese via the notorious Ho-Chi-Minh trail. The questions of how many supplies and how critical they are to the Viet-Cong are not ones on which many data are available.\*

Although China is not directly involved in the operation in South Viet-Nam so far as is known, China always lurks as a shadow on the back-drop against which counterinsurgency is played. China has had a traditional interest in dominating Southeast Asia and for almost 1000 years, from 111 BC to 939 AD, controlled Viet-Nam. (25) Viet-Nam is of importance to China because of its trade and its industrial base, and because during periods of colonial control and independent government has had an agricultural surplus. The Vietnamese, however, have had a traditional fear of China. Ho-Chi-Minh and General Giap are said to be fearful for the independence of (North) Viet-Nam. However during the Viet-Minh operation against the French, China was able to supply critical specialists, e.g., intelligence

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\* There is evidence some supplies have been paraded to the Viet-Cong from Laos (see Ref. 24).

specialists, communicators and weapons advisors. China also provided some of the critical supplies, such as 57 and 75 mm recoilless rifle rounds.

China has another role in South Viet-Nam's choice of strategies and tactics. Should the war in South Viet-Nam be escalated, either by the South Vietnamese or the North Vietnamese, or carried into North Viet-Nam, China may provide logistical support or military support to the North's Vietnamese. For these reasons, each potential policy for South Viet-Nam must be measured against the possibility of China's role in any escalated conflict.

## VII. ROLE OF THE UNITED STATES

The United States primarily has two roles: one of supplying the material necessary to carry on a counterinsurgency, and another to provide advice. In some cases, the U.S. actually provides direct support.

The Vietnamese economy is obviously unable to sustain a war of this type. Viet-Nam, for example, in 1962 had a gross national product per capita of \$94 U.S., a total gross national product of \$1.4 billion annually.\* This amount has probably not changed significantly. Counterinsurgency is expensive, as both the French and U.S. know from their experience during the first phase of the Indo-China war in 1945-1954 when the Viet-Minh were fighting against the Vietnamese and French troops. Chart 2 shows the French and U.S. expenditures for this period in U.S. dollars. The French spent \$7.6 billion and the U.S. aid was \$4.2 billion, including that money which they provided France for expenses in Viet-Nam.\*\* This represents an expenditure of approximately \$1.3 billion a year to support the counterinsurgency in Viet-Nam. The war was also expensive in terms of casualties. The indigenous forces lost 44,263 men--killed, died and missing,\*\*\* the French Union 45,534. Thus during the nine-year period, 89,797 were killed, died and missing.\*\*\*\*

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\* Based on per-capita GNP from p. 211, Ref. 26.

\*\* Pages 259-260, Ref. 26.

\*\*\* Killed in battle, died from non-combat sickness or accident, and missing in action.

\*\*\*\* Page 258, Ref. 20. From a USIS, American Embassy, Paris, March 1955, release based on published French reports.

CHART 2COSTS OF COUNTERINSURGENCY IN INDO-CHINA: 1945-1954

## Costs of 1945-1954 Indo-China War:

French expenditures		U.S. \$ 7.6 billion
U.S. (including through France)		<u>4.2</u> billion
		11.8
Indigenous forces killed, died and missing	44,263	
French union	<u>45,534</u>	
	89,897	

## U.S. costs from 1954 to July 1962

Economic aid	U.S. \$ 1.7 billion
Military aid	<u>0.7</u>
	2.4

FY 1963	\$133 million economic + PL 480 (military data classified)
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Source: Reference 26

U.S. costs are available for the period 1954 to July 1962, when the U.S. spent \$2.5 billion. \$1.7 billion was economic aid and \$0.8 billion was military aid.\* During this time most of the military aid was in the form of equipment. Economic aid included support to certain civil security groups, such as the police department, and support to such efforts as village and hamlet defense. These costs are not the total costs to the United States since the costs for military personnel and for administration and logistical support in the United States are not included. During the FY 1963, the last year for which data are available, \$133 million of economic assistance was given plus Public Law 480 funds which provide food under the "Food for Peace" program.<sup>(26)</sup> Military data for this and subsequent periods are classified.

Advisors are the second major contribution of the United States. The United States can provide technical assistance, particularly on incorporating modern technology in the country's economy and military organization. U.S. advisors cannot, however, provide basic information on terrain, inhabitants' culture or tactics. Advisors at high government level have assisted in the development of infrastructures and the introduction of western technology and ideas. At high military level, advisors have assisted in the development of military forces, logistical systems and have introduced modern weapons technology. During the period 1954 to 1961, this advice was primarily aimed at developing conventional forces to withstand

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\*Page 170, Ref. 26.

a massive attack from North Viet-Nam.\* This attack has never come. Subsequent to this period, the Vietnamese military forces have been altered to include a counterinsurgency capability. This has involved increasing mobility, providing security forces and intensive coordination and liaison with other civil security programs. At a lower military level, advisors can provide information on equipment operation, some motivation to the Vietnamese, and control for U.S. programs to try to assure that U.S. monies and materials are actually spent as the U.S. intends.

Another effort has been the civil and military joint U.S.-VN research development programs. So far these programs have not produced any gadget which in itself would provide a solution to counterinsurgency: nor, obviously, was this intended, in spite of the publicity for specific equipments. An R&D program in a less-developed country involved in a counterinsurgency operation can contribute in several ways. First, it can contribute to the introduction of modern technology. Second, it can serve as an introduction to modern analytic skills--for example, system analysis, operations analysis and similar techniques which the U.S. uses to guide its efforts towards effective solutions. Such an effort can also provide information to the U.S. personnel involved on the local environment, and culture.

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\* Lt. General Samuel T. Williams (Ret.), Chief of the Military Assistance Advisory Group (MAAG) from 1955 until 1960, describes U.S. policy in an interview in Ref. 27.

The U.S. also provides direct support to the Vietnamese government in certain areas of technology which have not yet been incorporated in the Vietnamese culture and which is perhaps best done by U.S. personnel. For example, operation of the multi-million dollar troposcatter link providing basic communications to the country by means of troposcatter sites located from Hue' south along the coast to Saigon and into the Delta.\* This tropo system was installed by the U.S. Air Force and is being operated by the U.S. Army Signal Corps. Another example of technological support is aircraft engine maintenance. The U.S. provides, by contract arrangements, for aircraft engine maintenance support in Viet-Nam.

In some cases the U.S. provides direct military support to the Vietnamese.\*\* One example is Army aviation where reconnaissance and close air support helicopters and fixed-wing aircraft are assigned directly to U.S. advisors. These aircraft can be deployed

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\*This troposcatter link was installed in 1962 and dubbed the "Back-Porch" system. Its relation to the other troposcatter links in the Pacific is given in Ref. 28. Reference 29 describes the troposcatter technique and cites the danger of Viet-Cong attack as an advantage over line-of-sight systems for Back-Porch.

\*\*Army and Marine helicopter units were sent to Viet-Nam in 1962, and the first armed helicopters were used in late 1962; see Ref. 30. The testing program for armed helicopters is described in Refs. 5 and 31 and by the ACTIV Test Director, General Rowny, in Ref. 32. The general Air Force mission in Viet-Nam is described in Ref. 33. The USAF-operated C-123 squadrons' mission is described in Ref. 34; the RF-101 reconnaissance in Ref. 35; the VNAF fighter aircraft in Refs. 36 and 37 (aircraft markings can be observed in the accompanying photographs).

and directed by U.S. advisors. The U.S. Air Force has provided reconnaissance observation and strike aircraft to the Vietnamese Air Force. These aircraft are generally operated by American instructor pilots and Vietnamese pilots. U.S. Air Force does, however, operate the strategic reconnaissance effort in South Viet-Nam.



### VIII. RESOURCE ALLOCATION PROBLEM

There is a vital interrelationship between U.S. and Vietnamese actions which sometimes is overlooked by the planner. For example, U.S. dollars cannot be translated directly into programs in Viet-Nam. Their limited resources and their ability to service competing U.S. programs are constraints to Vietnamese actions.

Two of the scarce resources in South Viet-Nam are trained Vietnamese manpower, e.g., radio technicians, civil administrators; communications and transportation; and government infrastructures. Any overall strategy must recognize the constraints caused by these scarce resources over the short run. In the long run, Vietnamese manpower can be trained, communications can be built, transportation systems can be built and operated (though perhaps not secured), and government infrastructures can be developed. But over the short run, these constraints must be observed.

In allocating these scarce resources, there are some inevitable alternatives which must be examined. For instance, should the particular project or program be executed by U.S. personnel or by Vietnamese personnel? If this particular program requires extensive technology such as the troposcatter system, there is good reason to argue that the U.S. should, in the short term, operate the particular program. On the other hand, U.S. personnel are far more expensive in terms of dollar cost to the United States, in terms of security forces which must be provided for them, and in terms of logistical requirements, than Vietnamese. In addition, to maintain Vietnamese military effectiveness it is necessary for the war to remain a Vietnamese war.